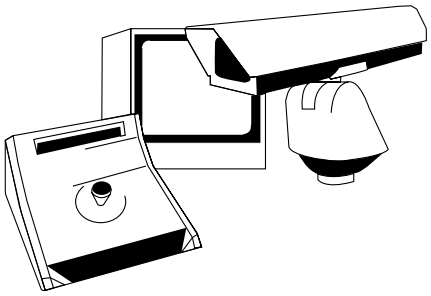

EH4700L Legacy® Series Environmental Enclosures

Installation/ Operation Manual

C1415M-F (8/05)

Pelco • 3500 Pelco Way, Clovis • CA 93612-5699 USA • www.pelco.com
In North America and Canada: Tel (800) 289-9100 or FAX (800) 289-9150
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CONTENTS

Section		Page
1.0	GENERAL	3
1.1	IMPORTANT SAFEGUARDS AND WARNINGS	3
2.0	DESCRIPTION	4
2.1	MODELS	4
2.2	CERTIFICATIONS	4
3.0	INSTALLATION	5
4.0	OPERATION	9
5.0	MAINTENANCE	9
5.1	SERVICE MANUAL	9
6.0	SPECIFICATIONS	10
7.0	WARRANTY AND RETURN INFORMATION	12

LIST OF ILLUSTRATIONS

Figure		Page
1	Exploded Assembly Diagram for Blower	5
2	EH4700L Series Input Wiring Diagram	7
3	EH4700L Dimension Drawing	10

REVISION HISTORY

Manual #	Date	Comments
C1415M	10/94	Original version.
C1415M-A	12/94	Rev. A. Revised to include new PCB9000276 wiring diagram and parts list as per ECO# 94-578.
C1415M-B	8/95	Rev. B. Figures 1, 2 and 6 revised; Section 4.1.5 PCB Kit Assembly List also revised.
C1415M-C	2/96	Rev. C. Expanded installation instructions; added troubleshooting section; changed heater specifications.
C1415M-D	3/96	Rev. D. Modified installation instructions, Figure 1 and Table A per ECO# 96-107, which added power supply barriers and cover to circuit board.
	7/96	Changed specification for maximum camera size in -1, -2 and -3 models. Updated Figure 3 and respective table to show added 24 VDC rectifier per ECO# 96-159.
	10/96	Added temperature specifications when using heater, TI47 thermal insulation and WD47 defroster.
C1415M-E	5/98	Removed installation instructions for accessories, which have a separate manual. Moved service information and exploded assembly drawings to new manual, C1405SM. Changed manual to new format.
C1415M-F	8/05	Revised ratings per ECO 05-10441. Added WEEE statement.

1.1 IMPORTANT SAFEGUARDS AND WARNINGS

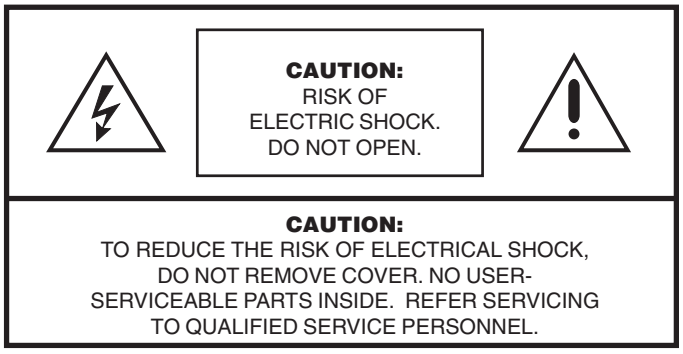
Prior to installation and use of this product, the following WARNINGS should be observed.

1. Installation and servicing should only be done by qualified service personnel and conform to all local codes.
2. Unless the unit is specifically marked as a NEMA Type 3, 3R, 3S, 4, 4X ,6 or 6P enclosure, it is designed for Indoor use only and it must not be installed where exposed to rain and moisture.
3. Only use replacement parts recommended by Pelco.
4. After replacement/repair of this unit's electrical components, conduct a resistance measurement between line and exposed parts to verify the exposed parts have not been connected to line circuitry.
5. The installation method and materials should be capable of supporting four times the weight of the enclosure, pan/tilt, camera and lens combination.

The product and/or manual may bear the following marks:

This symbol indicates that dangerous voltage constituting a risk of electric shock is present within this unit.

This symbol indicates that there are important operating and maintenance instructions in the literature accompanying this unit.



Please thoroughly familiarize yourself with the information in this manual prior to installation and operation.

2.0 DESCRIPTION

Environmental enclosures in the EH4700L Series are used with Pelco's PT480 Series pan/tilt units.

The enclosures are constructed of aluminum.

You can install cameras with either fixed focal length lenses or motorized zoom lenses (up to 10X). All models have an adjustable camera sled to accommodate different sizes of cameras and lenses.

2.1 MODELS

EH4718L	Environmental enclosure with rear opening lid. Lid has gas spring to hold it open. 18-inch (45.72 cm) length.
EH4718L-1	EH4718L with 120 VAC thermostatically controlled heater and blower.
EH4718L-2	EH4718L with 24 VAC thermostatically controlled heater and blower.
EH4718L-3	EH4718L with 230 VAC thermostatically controlled heater and blower.
EH4722L	Environmental enclosure with rear opening lid. Lid has gas spring to hold it open. 22-inch (55.88 cm) length.
EH4722L-1	EH4722L with 120 VAC thermostatically controlled heater and blower.
EH4722L-2	EH4722L with 24 VAC thermostatically controlled heater and blower.
EH4722L-3	EH4722L with 230 VAC thermostatically controlled heater and blower.

1. Unlatch and raise the enclosure lid. The gas spring will hold the lid in place when it is fully opened.

2. Remove the camera sled from the rail:

   a. Loosen the screws.

   b. Slide the sled so that the screws are in the large part of the mounting holes.

   c. Remove the sled.

   d. Remove the parts tied to the sled.

3. **EH4718L-1, -2, -3 Models, and EH4722L-1, -2, -3 Models Only -** If you are installing the enclosure in a marine or high-moisture environment, make the following modifications to your enclosure:

   Refer to Figure 1 for an exploded assembly diagram of the blower assembly.

   a. Remove the two sets of screws and washers (A, B, C) that secure the fan shroud (3) to the bottom of the enclosure.

   b. Remove the four screws (D) that secure the fan (4) to the back of the enclosure.

   c. Move the fan out of the way and remove the fan shroud.

   d. Turn the fan around so that it blows toward the viewing window (refer to the arrows on the fan).

   e. Reinstall the fan on the back of the enclosure.

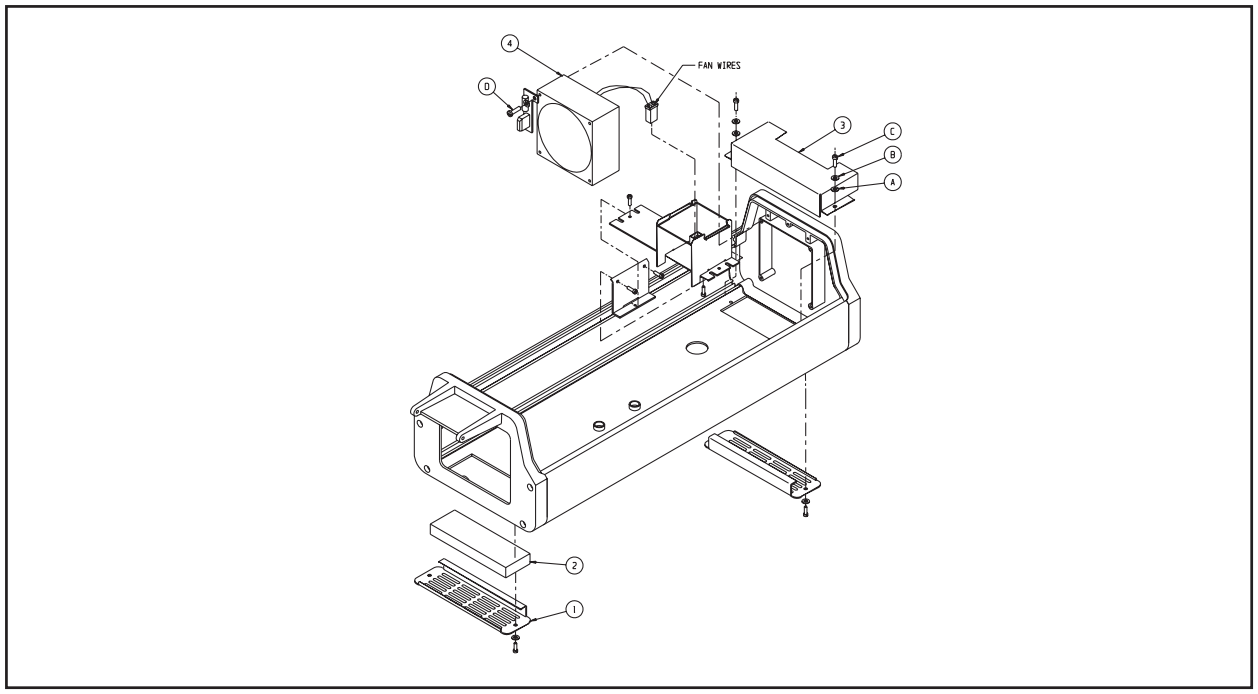


Figure 1. Exploded Assembly Diagram for Blower

f. Close the enclosure lid.

g. On the bottom of the enclosure, remove the vent grills (1) and filter (2) at the front and back of the enclosure. Replace the grills with the vent cover plates that were attached to the camera sled as loose equipment.

h. Open the enclosure lid.

4. Mount the camera to the sled with the 1/4-20 Phillips-head screws that are provided in the parts bag. You can mount the camera to either side of the sled. Note that the edges of the sled are bent and that one lip is wide and the other is narrow.

   Normally you should mount the camera so that the wide lip of the sled fits over the mounting screws.

   If you are installing a camera with a low optical center line or a camera with a large diameter lens, mount the camera so that the narrow lip of the sled fits over the mounting screws. This elevates the sled.

5. Install the sled and camera in the enclosure:

   a. If the camera's lens is adjustable, extend the lens to its maximum length.

   b. Place the sled on the rail over the three attaching screws.

   c. Slide the sled so that the screws fit into the narrow slots of the mounting holes.

   d. Tighten the screws just enough to hold the sled to the rail, but not too tight to keep the rail and sled from moving.

   e. Slide the camera sled forward until the lens almost touches the window.

   f. Tighten the three screws to secure the camera sled to the rail.

6. Connect the video cable in the enclosure to the video output connection on the camera.

7. If you are going to synchronize cameras, connect the synchronization cable in the enclosure to the synchronization connection on the camera.

8. If your camera has a motorized zoom lens control, connect or wire the camera's lens control to the LENS or LENS CONTROL connector on the circuit board. Refer to Figure 2 to see where to connect different lens connector options.

9. Wire power from the circuit board to the camera (refer to Figure 2).

   There are two ways to supply power to the camera: when the power requirements for the camera and enclosure are the same (for example, if the camera and accessories use 24 VAC), and when the power requirements for the camera and the enclosure are different (for example, if the camera uses 24 VAC and the accessories use 120 VAC).

   When the power requirements are the same:

   When the power requirements are the same, there are two ways to connect power:

   a. A three-pin plug is supplied as loose equipment. Connect the wires from the plug to the camera as follows:
      Brown - AC HI
      Blue - AC NT
      Green - Ground

   Remove the plastic cover over the power supply section of the circuit board.

   Connect the plug to the CAM 1 socket on the circuit board.

WARNING: *Camera damage possible*. *You can damage your camera if you connect it to the wrong connector.*

If your camera will use the same power as the enclosure, plug the camera into the CAM 1 socket on the circuit board inside the enclosure.

If your camera's voltage will be different from the enclosure's voltage, plug the camera into the CAM 2 socket only. ***DO NOT*** *plug the camera into the CAM 1 socket or you can damage your camera. CAM 1 has enclosure voltage on it.*

BE CAREFUL - REMEMBER CAM 1 IS ENCLOSURE POWER

NEVER PLUG YOUR CAMERA INTO CAM 1 IF THE CAMERA'S VOLTAGE IS DIFFERENT FROM THE ENCLOSURE'S VOLTAGE.

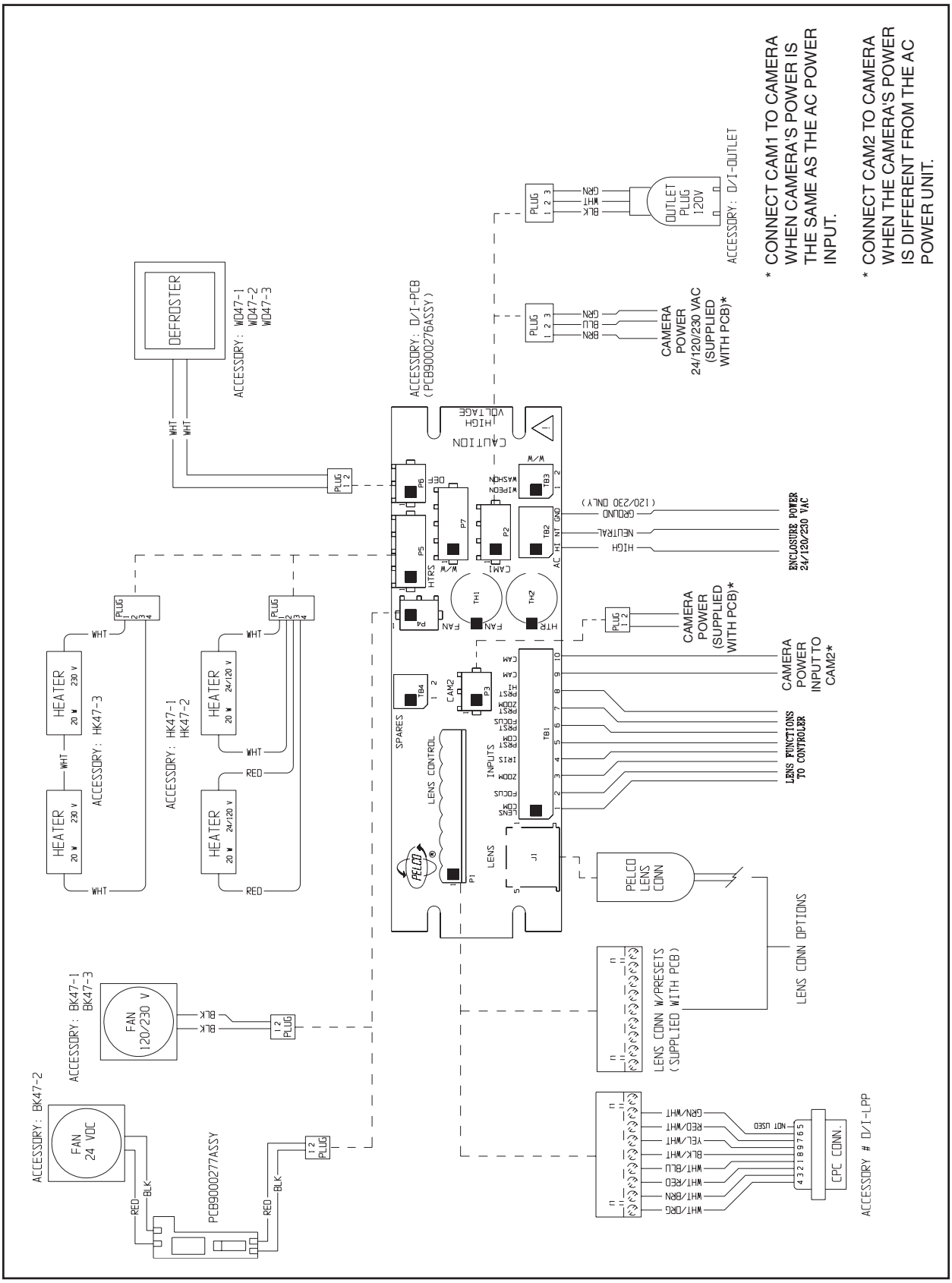

DEFROSTER
ACCESSORY: WD47-1 WD47-2 WD47-3
ACCESSORY: D/I-PCB (PCB9000276ASSY)
CAMERA POWER 24/120/230 VAC (SUPPLIED WITH PCB)*
ACCESSORY: D/I-OUTLET
* CONNECT CAM1 TO CAMERA WHEN CAMERA'S POWER IS THE SAME AS THE AC POWER INPUT.
* CONNECT CAM2 TO CAMERA WHEN THE CAMERA'S POWER IS DIFFERENT FROM THE AC POWER UNIT.
ENCLOSURE POWER 24/120/230 VAC
CAMERA POWER (SUPPLIED WITH PCB)*
CAMERA POWER INPUT TO CAM2*
LENS FUNCTIONS TO CONTROLLER
HEATER
ACCESSORY: HK47-3
ACCESSORY: HK47-1 HK47-2
ACCESSORY: BK47-1 BK47-3
FAN 120/230 V
ACCESSORY: BK47-2
FAN 24 VDC
PCB9000277ASSY
PELCO LENS CONN
LENS CONN W/PRESETS (SUPPLIED WITH PCB)
LENS CONN OPTIONS
CPC CONN.
ACCESSORY # D/I-LPP

Figure 2. EH4700L Series Input Wiring Diagram

Replace the plastic cover.

or

b. If both the camera and enclosure use 120 VAC and you ordered the optional 120 VAC electrical outlet accessory (O/I OUTLET), connect the 120 VAC plug to the camera. Connect the three-pin plug to CAM 1 (remove the plastic cover over the circuit board and replace the cover after you plug in the connector).

When the power requirements are the different:

A two-pin plug is supplied as loose equipment.
Connect the wires from the plug to the camera as follows:
Brown - AC HI
Blue - AC NT

Connect the plug to the CAM 2 socket on the circuit board.

10. Adjust the focus and iris on the camera, if necessary.

11. Close the enclosure lid and mount the enclosure to the pan/tilt unit:

a. Lift the enclosure over the pan/tilt unit and carefully lower the enclosure into the pan/tilt unit to mate the 26-pin RediLINK® D-type connectors in the shaft of the pan/tilt unit and on the bottom of the enclosure.

b. Once the connectors are mated, apply firm pressure downward and to the back of the enclosure to fully seat the enclosure in the pan/ tilt unit.

c. Slowly remove your hands from the enclosure, making sure that the enclosure is balanced on the pan/tilt unit.

d. With the 5/32 Allen wrench that is supplied with the enclosure, tighten the two set screws on the back of the enclosure where it mounts to the pan/tilt unit.

WARNING: *Failure to tighten the screws may result in damage to the enclosure when you operate the camera.*

4.0 OPERATION

If your enclosure has a thermostatically controlled blower, the thermostat is set to turn the fan on between 77° and 93°F (25° and 34°C) and to turn the fan off between 62° and 78°F (17° and 26°C).

If your enclosure has thermostatically controlled heaters or defroster, the thermostat is set to turn them on between 42° and 58°F (6° and 14°C) and to turn them off between 72° and 88°F (22° and 31°C).

5.0 MAINTENANCE

Perform the following maintenance at regularly scheduled intervals to prolong the operational life and appearance of the equipment.

1. Clean the window with a mild nonabrasive detergent in water and a soft cloth to maintain picture clarity.
2. If your enclosure has a blower, clean the foam filter as follows:
   a. On the bottom front of the enclosure, remove the two screws in the vent grill.
   b. Remove the vent grill and take out the filter.
   c. Clean the filter with warm water and mild detergent, dry thoroughly, and replace it in the grill.
   d. Reinstall the vent grill.

To order replacement filters, use the part number EH470010009.

5.1 SERVICE MANUAL

If you need to service your unit, obtain a service manual in on the following ways:

- Go to Pelco's web site at http://www.pelco.com and find service manual C1405SM.
- Contact Pelco's Literature Department and request service manual C1405SM.

6.0 SPECIFICATIONS

ELECTRICAL

Input Voltage:	24, 120 or 230 VAC, 50/60 Hz
Electrical Connections:	One each of the following: 3-connector terminal block for power input 6-pin lens connector 9-connector terminal block for lens wiring 10-connector terminal block for camera/lens wiring 2-connector terminal block for spare connections 3-pin socket for camera power input 2-pin socket for optional camera power input 2-pin socket for blower 2-pin socket for defroster 4-pin socket for heaters BNC for video BNC for camera synchronization 26-pin RediLINK® D-type connector (links enclosure to pan/tilt)
Input Power:	Heater -1 60 watts
Heater -2	50 watts
Heater -3	55 watts
Defroster	15 watts
Blower	8 watts

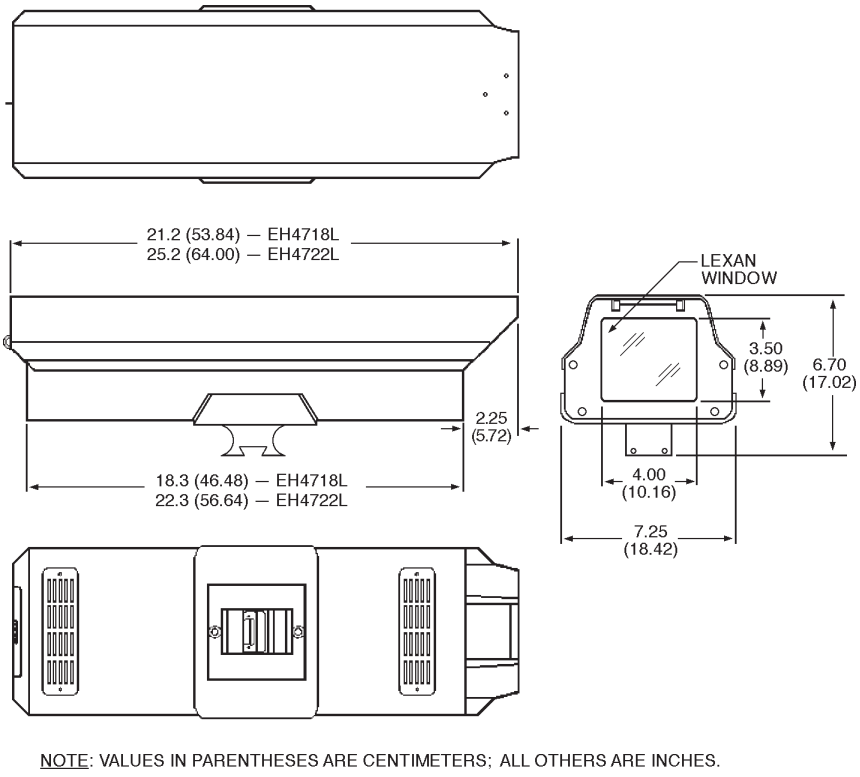


Figure 3. EH4700L Dimension Drawing

MECHANICAL

Construction:	Aluminum
Finish:	Polyester powder coat, 2-tone gray
Window:	Plastic
Window Viewing Area:	3.50" H x 4.00" W (8.89 x 10.16 cm)
Camera Mounting:	Removable camera sled that can be inverted to accommodate various cameras and lenses
Maximum Camera and Lens Size	Accommodates camera and lens combinations (including BNC connector) up to:
EH4718L:	13" L x 5.5" W x 4.25" H (33.02 x 13.97 x 10.80 cm)
EH4718L-1, -2, -3:	13" L x 4.75" W x 4.25" H (33.02 x 12.07 x 10.80 cm)
EH4722L:	17" L x 5.5" W x 4.25" H (43.18 x 13.97 x 10.80 cm)
EH4722L:	17" L x 4.75" W x 4.25" H (43.18 x 12.07 x 10.80 cm)
Rear Latch:	Stainless Steel
Dimensions:	See Figure 3

Weight	Unit	Shipping
EH4718L:	7.25 lb (3.78 kg)	9 lb (4.08 kg)
EH4718L-1, -2, -3:	8.5 lb (3.85 kg)	10 lb (453 kg)
EH4722L:	8.5 lb (3.85 kg)	11 lb (4.98 kg)
EH4722L-1, -2, -3:	9.75 lb (4.42 kg)	11 lb (4.98 kg)

GENERAL

Ratings:	Meets NEMA Type 3R and IP54 standards	
Environment:	Indoor/outdoor -10° to 120°F (-23° to 49°C)	
Temperature increase inside enclosure with heater operating:	With vent grills installed:	17°F (9.5°C) increase.
	With vent covers and TI47 thermal insulation installed:	25°F (13.8°C) increase.
	With vent covers, TI47 thermal insulation and WD47 defroster installed:	35°F (19.4°C) increase.

(Design and product specifications subject to change without notice.)

This equipment contains electrical or electronic components that must be recycled properly to comply with Directive 2002/96/EC of the European Union regarding the disposal of waste electrical and electronic equipment (WEEE). Contact your local dealer for procedures for recycling this equipment.

7.0 WARRANTY AND RETURN INFORMATION

WARRANTY

Pelco will repair or replace, without charge, any merchandise proved defective in material or workmanship for a period of one year after the date of shipment.

Exceptions to this warranty are as noted below:

- Five years on FT/FR8000 Series fiber optic products.
- Three years on Genex® Series products (multiplexers, server, and keyboard).
- Three years on Camclosure® and fixed camera models, except the CC3701H-2, CC3701H-2X, CC3751H-2, CC3651H-2X, MC3651H-2, and MC3651H-2X camera models, which have a five-year warranty.
- Two years on standard motorized or fixed focal length lenses.
- Two years on Legacy®, CM6700/CM6800/CM9700 Series matrix, and DF5/DF8 Series fixed dome products.
- Two years on Spectra®, Esprit®, ExSite™, and PS20 scanners, including when used in continuous motion applications.
- Two years on Esprit® and WW5700 Series window wiper (excluding wiper blades).
- Eighteen months on DX Series digital video recorders, NVR300 Series network video recorders, and Endura™ Series distributed network-based video products.
- One year (except video heads) on video cassette recorders (VCRs). Video heads will be covered for a period of six months.
- Six months on all pan and tilts, scanners or preset lenses used in continuous motion applications (that is, preset scan, tour and auto scan modes).

Pelco will warrant all replacement parts and repairs for 90 days from the date of Pelco shipment. All goods requiring warranty repair shall be sent freight prepaid to Pelco, Clovis, California. Repairs made necessary by reason of misuse, alteration, normal wear, or accident are not covered under this warranty.

Pelco assumes no risk and shall be subject to no liability for damages or loss resulting from the specific use or application made of the Products. Pelco's liability for any claim, whether based on breach of contract, negligence, infringement of any rights of any party or product liability, relating to the Products shall not exceed the price paid by the Dealer to Pelco for such Products. In no event will Pelco be liable for any special, incidental or consequential damages (including loss of use, loss of profit and claims of third parties) however caused, whether by the negligence of Pelco or otherwise.

The above warranty provides the Dealer with specific legal rights. The Dealer may also have additional rights, which are subject to variation from state to state.

If a warranty repair is required, the Dealer must contact Pelco at (800) 289-9100 or (559) 292-1981 to obtain a Repair Authorization number (RA), and provide the following information:
1. Model and serial number
2. Date of shipment, P.O. number, Sales Order number, or Pelco invoice number
3. Details of the defect or problem

If there is a dispute regarding the warranty of a product which does not fall under the warranty conditions stated above, please include a written explanation with the product when returned. Method of return shipment shall be the same or equal to the method by which the item was received by Pelco.

RETURNS

In order to expedite parts returned to the factory for repair or credit, please call the factory at (800) 289-9100 or (559) 292-1981 to obtain an authorization number (CA number if returned for credit, and RA number if returned for repair).

All merchandise returned for credit may be subject to a 20% restocking and refurbishing charge.

Goods returned for repair or credit should be clearly identified with the assigned CA or RA number and freight should be prepaid. Ship to the appropriate address below.

If you are located within the continental U.S., Alaska, Hawaii or Puerto Rico, send goods to:

Service Department
Pelco
3500 Pelco Way
Clovis, CA 93612-5699

If you are located outside the continental U.S., Alaska, Hawaii or Puerto Rico and are instructed to return goods to the USA, you may do one of the following:
If the goods are to be sent by a COURIER SERVICE, send the goods to:

Pelco
3500 Pelco Way
Clovis, CA 93612-5699 USA

If the goods are to be sent by a FREIGHT FORWARDER, send the goods to:

Pelco c/o Expeditors
473 Eccles Avenue
South San Francisco, CA 94080 USA
Phone: 650-737-1700
Fax: 650-737-0933

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